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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/052,094	01/18/2002	David Marples	1365	5824

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EXAMINER	
DUONG, OANH L	

ART UNIT	PAPER NUMBER
2155	

DATE MAILED: 10/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/052,094	MARPLES ET AL.	
	Examiner	Art Unit	
	Oanh Duong	2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *03* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 August 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *19-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *19-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-18 have been canceled.

Claims 19-21 are presented for examination.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCann et al. (McCann) (US 6,052,725) in view of Tuomenoksa et al. (Tuomenoksa) (US 2002/0023210 A1), and further in view of Calhoun (US 6,463,475 B1).

Regarding claim 19, McCann teaches a communication system comprising:

a first communication device, said first communication device having a primary IP address (i.e., IP address is assigned to the communication device 16, col. 2 lines 66-67),

a plurality of second communication devices connectable to a public network (i.e., a network of computers interconnected by using the Internet Protocol, col. 1 lines 51-65), and

a secure hub including interfaces to the public network (col. 7 lines 22-23), means in response to the first communication device for establishing a single virtual pipe between said secure hub and the first communication device for tunneling

communication (col.7 lines 10-26, McCann discloses a tunnel (or virtual pipe) is established between two communication devices in response to a tunnel set up request), and means for assigning a secondary IP address to said first communication device (i.e., the non-local dynamic IP address has been assigned to the communication device, col.7 line 56-col. 8 line 4) and associating said secondary IP address with said established single virtual pipe (i.e., the tunnel (or virtual pipe) is used to transmit IP packets (having secondary IP address as a destination) from the IP network to the communication device (which the secondary IP address is assigned to), col. 7 lines 18-22).

McCann does not explicitly teach security access blocking apparatus that provides the first communication device access to the public network and separates the first and second communication devices, said security blocking apparatus normally allowing outgoing communication from said first communication device but normally disallowing incoming communication to sad first communication device, bypassing said security blocking apparatus, and routing and switching functionalities.

Tuomenoksa teaches method and system wherein a tunnel between a first and second devices is enabled (see abstract). Tuomenoksa teaches security access blocking apparatus that provides the first communication device access to the public network and separates the first and second communication devices, said security blocking apparatus normally allowing outgoing communication from said first communication device but normally disallowing incoming communication to sad first

communication device (page 15 paragraph 155), and tunneling said communications and bypassing said security access blocking apparatus (page 15 paragraphs 155-156).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate security access blocking apparatus that provides the first communication device access to the public network and separates the first and second communication devices, said security blocking apparatus normally allowing outgoing communication from said first communication device but normally disallowing incoming communication to sad first communication device, bypassing said security blocking apparatus of Tuomenoksa in the communication system of McCann. One would be motivated to do so to easily and effectively leverage the power of a public network for private connectivity without the complexity, cost and/or time (Tuomenoksa, page 2 paragraph 17 lines 2-6).

Calhoun, in the same field of endeavor, teaches routing and switching functionalities (col. 4 lines 35-59-59). It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to combine the teachings of McCann to include the routing and switching functionalities as taught by Calhoun because it would control of tunnel access to the destination network/device, thereby reducing congestion at destination (Calhoun, col. 2 lines 60-62).

Regarding claim 20, McCann teaches the communication system in accordance with claim 19 further including means defining a pool of available IP addresses, said

secure hub obtaining said secondary IP address from said IP address defining pool means (col. 5 lines 54-56).

3. Claims 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCann in view of Tuomenoksa

Regarding claim 21, McCann teaches a communication system (i.e., communication system 10, Fig. 1) comprising

a public network (i.e., IP network 14, Fig. 1 line 53),

a plurality of second communication devices connectable through a public network, said public network being between said second communication devices and said first communication device, (i.e., a network of computers interconnected by using the Internet Protocol, col. 1 lines 51-65),

a secure hub (i.e., router 34), said secure hub including:

interfaces connecting said secure hub to public network (i.e., router 34 establishes a communication 56 with the IP network 14, Fig. 1 col. 7 lines 22-23);

means in response to the first communication device for establishing a single virtual pipe between the first communication device and said secure hub (col.7 lines 10-26, McCann discloses a tunnel (or virtual pipe) is established between two communication devices in response to a tunnel set up request);

a pool of available IP addresses (i.e., a remote pool of non-local dynamic IP addresses, col. 5 lines 38-39); and

means for assigning an IP address from said pool to the established single virtual pipe/communication devices, whereby the first device has a secondary IP address (i.e., the non-local dynamic IP address has been assigned to the communication device, col.7 line 56-col. 8 line 4);

means for routing communications from any of the second communication devices and addressed to the first communication device to the established virtual pipe (i.e., the tunnel is used to transmit IP packets from the IP network to the communication device, col. 7 lines 18-22).

McCann does not explicitly teach a firewall, a first communication device behind said firewall and having a primary IP address, said firewall normally allowing outgoing communications from said first communication device but normally disallowing incoming communications to said first communication device, and means for tunneling said communications over the established virtual pipe to the first communication device thereby bypassing said firewall

Tuomenoksa teaches method and system wherein a tunnel between a first and second devices is enabled (see abstract). Tuomenoksa teaches a firewall (page 15 paragraph 155 line 3), a first communication device behind said firewall and having a primary IP address, said firewall normally allowing outgoing communications from said first communication device but normally disallowing incoming communications to said first communication device (page 15 paragraph 155), and means for tunneling said communications over the established virtual pipe to the first communication device thereby bypassing said firewall (page 15 paragraphs 155-156).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate a firewall, a first communication device behind said firewall and having a primary IP address, said firewall normally allowing outgoing communications from said first communication device but normally disallowing incoming communications to said first communication device, and means for tunneling said communications over the established virtual pipe to the first communication device thereby bypassing said firewall of Tuomenoksa in the communication system of McCann. One would be motivated to do so to easily and effectively leverage the power of a public network for private connectivity without the complexity, cost and/or time (Tuomenoksa, page 2 paragraph 17 lines 2-6).

Response to Arguments

4. Applicant's arguments with respect to claims 19-21 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

In the remarks, applicants argued in substance that

(**A**) Prior art does not teach means in response to the first communication device for establishing a single virtual pipe between the first communication device and the secure hub.

As to point (**A**), McCann does teach means in response to the first communication device for establishing a single virtual pipe between the first communication device and the secure hub (col.7 lines 10-26, McCann discloses a tunnel (or virtual pipe) is established between two communication devices in response to a tunnel set up request).

(**B**) Applicants' invention is not directly to solving any problem which requires reducing congestion at destination.

As to point (**B**), In response to applicant's argument that applicant's invention is not directed to solving any problem which requires reducing congestion at destination, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when

the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Oanh Duong whose telephone number is (571) 272-3983. The examiner can normally be reached on Monday- Friday, 2:00PM - 10:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on (571) 272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

O.D
October 20, 2005

SALEH NAJJAR
SUPERVISORY PATENT EXAMINER